

REMARKS

Applicant would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office action, and amended as necessary to more clearly and particularly describe the subject matter which applicant regards as the invention.

Claims 1-26 and 46-47 remain in the application. Independent claims 1, 46 and 47 have been amended herein. Specifically, these claims have been amended such that the implant portion, claimed therein, which is to be implanted is shaped so that it is implanted without substantial rotation. Support for this claim amendment is provided in Applicant's substitute specification, at least at paragraphs [0015] and [0019].

Claims 1-26 are objected to due to claim 1 including redundant use of the word "are". This has been remedied by amendment herein. Reconsideration and withdrawal of the objection to the claims is respectfully requested.

Claims 1-19, 21-26 and 46-47 stand rejected under 35 U.S.C. §103(a) as being unpatentable WO/02069817 to Aeschlimann et al (hereinafter Aeschlimann) in view of U.S. 3,672,058 to Nikoghossian (hereinafter Nikoghossian). For the following reasons, the rejection is traversed.

Regarding independent claim 1, as amended, even if the references were combined in the manner proposed, the claimed invention would not be taught.

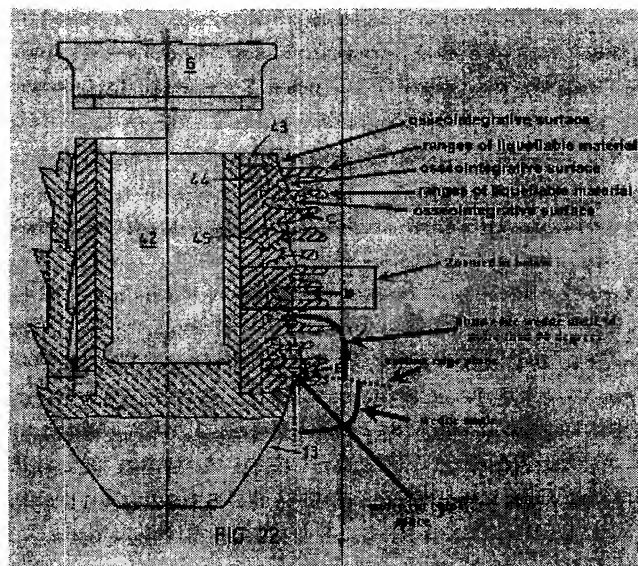
Claim 1 claims, in alternative first and second instances:

the implant portion to be implanted comprises a first type of surface ranges of a material, which is liquefiable (M) by mechanical oscillation,
or

a second type of surface ranges formed by pressing the liquefiable material out of a hollow space in the implant through openings.

In the first instance, the liquefiable material is on the implant surface before it is implanted and in the second instance the liquefiable material is pressed from the insideout during implantation.

The proposed combination of Aeschlimann and Nikoghossian does not teach the first instance of claim 1. No implant comprising a first type of surface ranges of a material which is liquefiable by mechanical oscillation is taught. Instead, in Aeschlimann a liquefiable material 44 is pushed out thorough a porous surface of a sleeve 13. Nikoghossian simply teaches metal screw threads on a dental implant and thus no liquefiable material is taught therein.



Further, Claim 1, as amended requires that the implant portion to be implanted:

- has cutting edges, which are capable of cutting the cavity wall of bone tissue,
- has cutting edges which are distanced from the implant axis by implant-axis to cutting edge distances which implant-axis-to-cutting edge distances are decreasing in the implanting direction, and
- *is shaped to be implanted without substantial rotation.*

These features are not all taught by the proposed combination. The Office action states that Nikoghossian teaches the claimed cutting edges. Applicant believes this is not true with respect to the claim as amended. Nikoghossian teaches a metal implant with screw threads that cut into tissue. A screw type implant requires an implantation process involving rotational movement, by which the implant is driven into the bone tissue. Thus, when an implant body including a screw end is screwed into the body, this also requires rotational movement. Rotation of the implant body comprises movement of the cutting edges in a direction which must have a lateral component and not only a vertical component as would be required if the implantation direction was parallel to the implantation axis.

It is not possible to drive a self-cutting screw type implant into the bone tissue in a movement parallel to the implant axis without an inherent lateral component as part of the rotational movement. The teaching of Nikoghossian requires substantial rotation because rotational movement is required for implanting screw-type implants.

This rotational movement however is precluded by claim 1, as amended.

Regarding independent claim 46, the claim requires that:

the implant portion to be implanted comprises surface ranges of a material, which is liquefiable by mechanical oscillation

As stated above regarding the first instance of claim 1, the proposed combination of references does not teach this feature. Nikoghossian is silent regarding material liquefiable by mechanical oscillation. In Aeschlimann, the material to be liquefied is located inside of the porous sleeve and not on the surface of the implant as required. Only during implantation is the liquefiable material forced through the sleeve.

Claim 46, as amended, also requires:

the implant portion to be implanted is shaped to be implanted without substantial rotation

and as stated above, the proposed combination of references does not teach this feature.

Rather, the proposed combination teaches a device with screw threads, thus requiring the device to be rotated substantially to be secured in place.

Regarding independent claim 47, this claim has been amended to state that:

the implant portion to be implanted is shaped to be implanted without substantial rotation

and as stated with respect to the prior independent claims, this feature is not taught or suggested.

Claims 2-19 and 21-26 depend directly or indirectly from claim 1 and are believed to be allowable at least for the reasons claim 1 is believed to be allowable.

Reconsideration and withdrawal of the rejection of claims 1-19, 21-26 and 46-47 under 35 U.S.C. §103(a) as being unpatentable Aeschlimann in view of Nikoghossian. For the following reasons, the rejection is traversed.

Claim 20 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Aeschlimann in view of Nikoshossian and further in view of U.S. 6,142,782 to Lazarof (hereinafter Lazarof). For the following reasons the Examiner's rejection is

traversed.

Claim 20 depends indirectly from claim 1 and as stated above the combination of Aeshclimann and Nikoghossian is deficient in teaching all of the features of amended claim 1 regarding the manner in which the implant is inserted. Lazarof fails to cure this combination in this regard and thus, claim 20 is believed to be allowable over the proposed combination of three references.

Reconsideration and withdrawal of the rejection of claim 20 under 35 U.S.C. §103(a) as being unpatentable over Aeschlimann in view of Nikoshossian and further in view of Lazarof. For the following reasons the Examiner's rejection is traversed.

In light of the foregoing, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 18-0160, our Order No. FRG-15998.

Respectfully submitted,

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